

Amdt. dated November 21, 2006
Reply to Office Action of June 21, 2006

EKNER *et al.*
Appl. No. 09/788,670

Remarks

Reconsideration of this Application is respectfully requested.

Upon entry of the foregoing amendment, claims 43-81 are pending in the application, with 43, 55 and 69 being the independent claims. Claims 1-42 have been canceled without prejudice to or disclaimer of the subject matter therein. New claims 43-81 are sought to be added. In addition, a paragraph beginning on page 13, line 29 of the present specification is being amended to correct a typographical error. These changes are believed to introduce no new matter, and their entry is respectfully requested.

Based on the above amendment and the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

Examiner Interview

Applicants thank the Examiner for the interview conducted on November 14, 2006. During the interview, Applicants discussed with the Examiner rewriting the claims to further clarify the claimed invention. Accordingly, Applicants have canceled the previously pending claims without prejudice to or disclaimer of the subject matter therein, and submit herewith rewritten claims 43-81.

Rejections under 35 U.S.C. § 103

Claims 1-13, 15-27, and 29-41 stand rejected und 35 U.S.C. § 103. On page 2 of the office action, the Examiner rejected claims 1-13, 15-27, and 29-41 as allegedly being obvious over U.S. Patent No. 6,199,088 to Weng et al. in view of U.S. Patent No. 5,181,183 to Miyazaki. On page 6 of the office action, the Examiner rejected claims 2-6, 16-20 and 30-34 as allegedly being obvious over Weng et al. in view of Miyazaki and U.S. Patent No. 6,711,602 to Bhandal et al. On page 7 of the office action, the Examiner rejected claims 7-8, 21-22 and 35-36 as allegedly being obvious over Weng et al. in view of Miyazaki, Bhandal et al. and U.S. Patent No. 4,538,239 to Magar.

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As noted above, in order to expedite prosecution and allowance of the present application, Applicants have canceled claims 1-42 without prejudice to or disclaimer of the subject matter therein. Thus, the rejections of claims 1-13, 15-27, and 29-41 are moot. Reconsideration and withdrawal of these rejections are respectfully requested.

New Claims 43-81

As discussed with the Examiner during the interview, Applicants are submitting rewritten claims in order to further clarify the claimed invention and in order to expedite prosecution and allowance of the present application. New claim 43 recites:

43. A processor, comprising:
a first array that is used to perform arithmetic multiplication, the first array having a first result output and a second result output;
a second array that is used to perform binary polynomial multiplication, the second array having a third result output; and
a carry propagation adder having a first input and a second input,
wherein the first input of the carry propagation adder is coupled to the first result output of the first array, and the second input of the carry propagation adder is coupled to the second result output of the first array and the third result output of the second array.

Similar features are recited in independent claims 55 and 69.

Support for new claims 43-81 is found throughout the written specification and figures, and in the original claims. See, for example, figures 3 and 4 of the present application and the written description thereof in particular. Figure 3 shows arrays 3030 coupled to a carry propagation adder 3058. Figure 4 shows a first array MARRAY 4100 used to perform arithmetic multiplication and a second array MPARRAY 4200 used to perform binary polynomial multiplication.

New claims 43-81 are patentable over Weng et al., Miyazaki, Bhandal et al. and Magar, either alone or in combination. These references neither teach nor suggest the combination of features recited in claims 43-81. Accordingly, consideration and allowance of claims 43-81 are respectfully requested.

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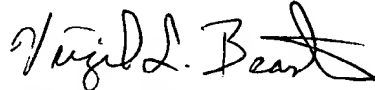
Conclusion

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

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